# How Can Green Environmental Policies Enhance Rural Energy Access?

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### Why Energy-Environment?

"Flavor of the decade"

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1985-1995 = Where are we going to find all the finance?

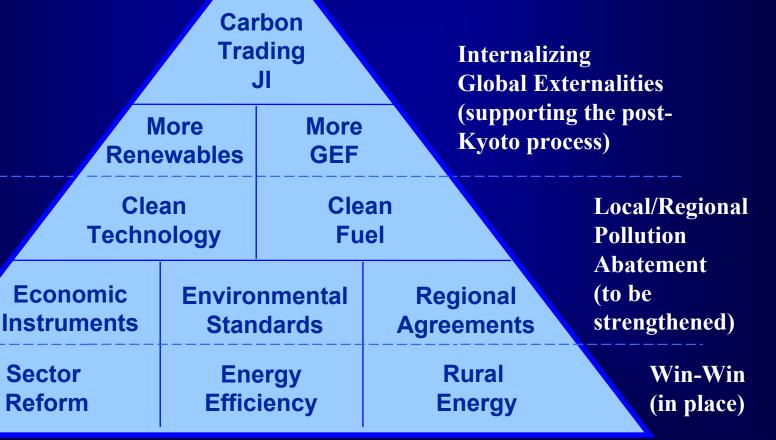
"Flavor of the decade"

1975-1985 = Where are we going to find all the oil?

1985-1995 = Where are we going to find all the finance?

1995-???? = How are we going to avoid despoiling the land, water and air (and avoid burning up the planet)?

## Fuel For Thought: Environmental Strategy for the New Century



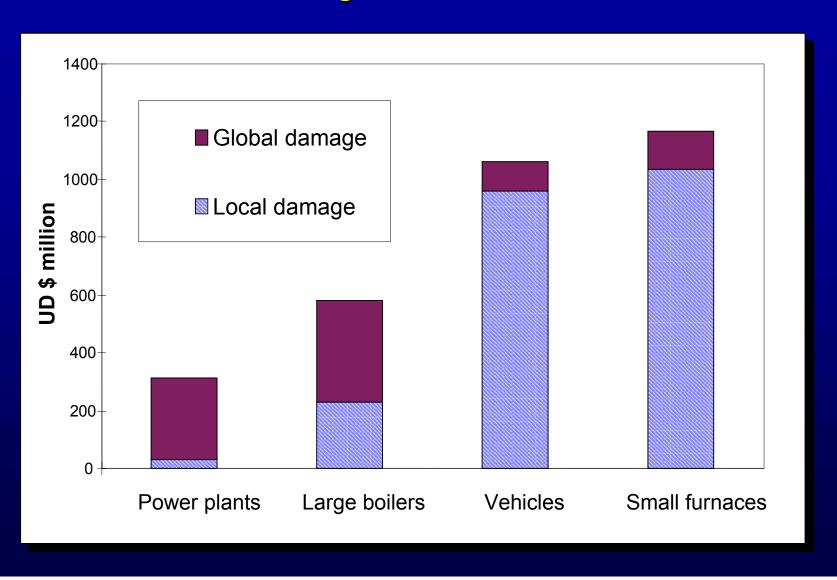
### Exploding some myths - #1

? Local desires for clean air will be a major driver for "Village Power" type off-grid/renewable energy



### Contribution to local and global damages

Average for six cities



### Exploding some myths

- ? Local desires for clean clean electricity will be a major driver for Village Power-type off-grid/renewable energy
  - degredation from unsustainable natural resource management
  - indoor air pollution
  - ... all much greater environmental health concerns

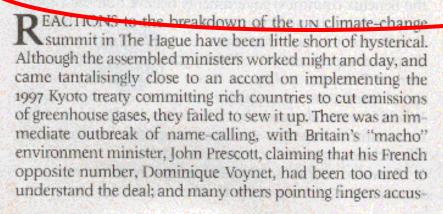


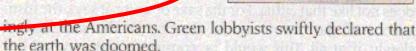
### Exploding some myths - #2

? The failure of COP-6 shows that the Kyoto Protocol is dead

#### Beyond The Haque

The collapse of last weekend's UN summit on global warming is not the disaster that many claim





Yet this is rubbish. Global warming is at least a 100-year problem. It is ridiculous to suggest that the earth is in sudden peril because negotiators have failed to agree on remedial action today. Ministers plan to meet again in six months' time in Bonn to continue their talks. A few more months will make little difference-so long as the outcome is a sound treaty with flexible provisions and institutions that endure.

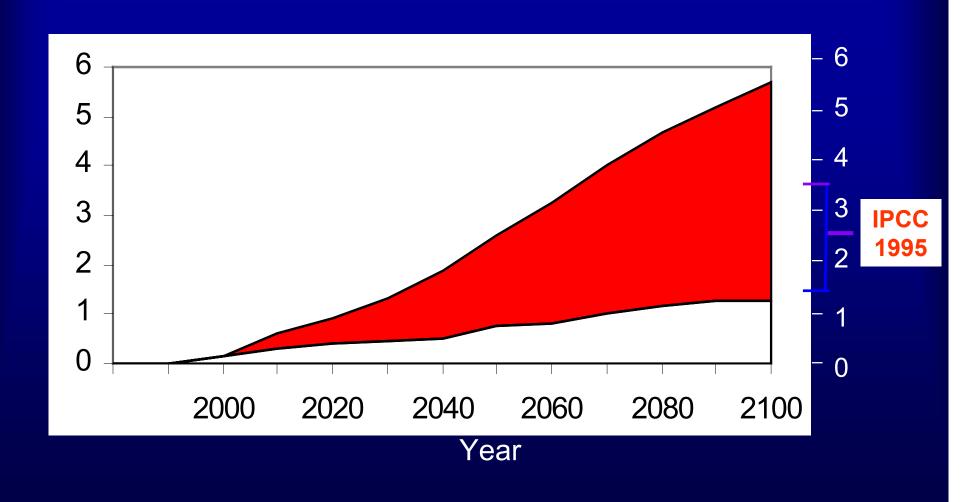
The Hague meeting offered some grounds for optimism on

Temperature variation

N. hemisphere

THE ECONOMIST DECEMBER 2ND 2000

### Projected Temperature Change IPCC 2000



### Exploding some myths - #2

- ? The failure of COP-6 shows that the Kyoto Protocol is dead
  - delays are not fatal
  - excellent progress made on the CDM



- business supporting implementation of the market mechanisms
- climate change problem is not going away
- climate change poised to be a major driver for the "Village Power" agenda

#### PV and Carbon Markets

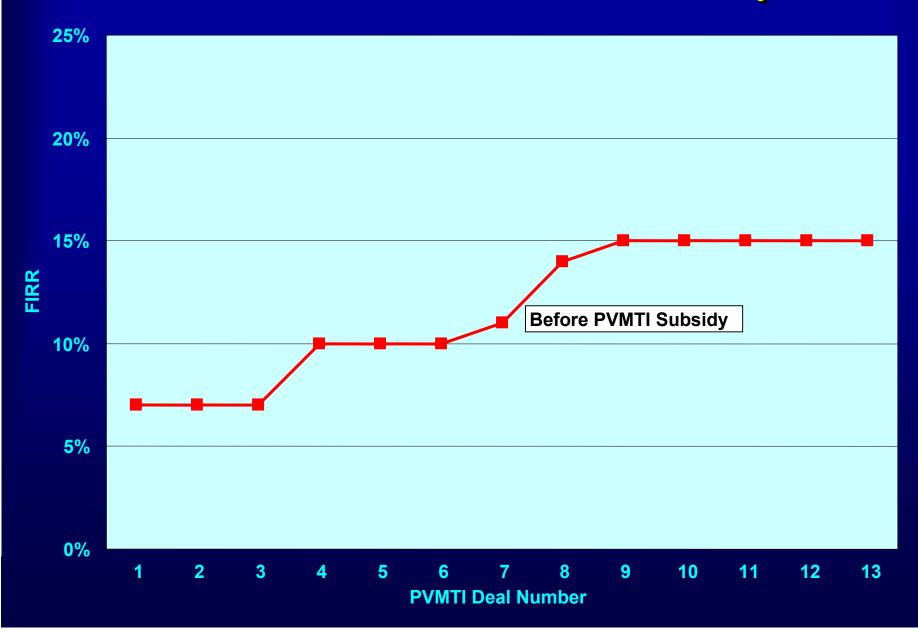
### PVMTI Dealflow Analysis Early Results



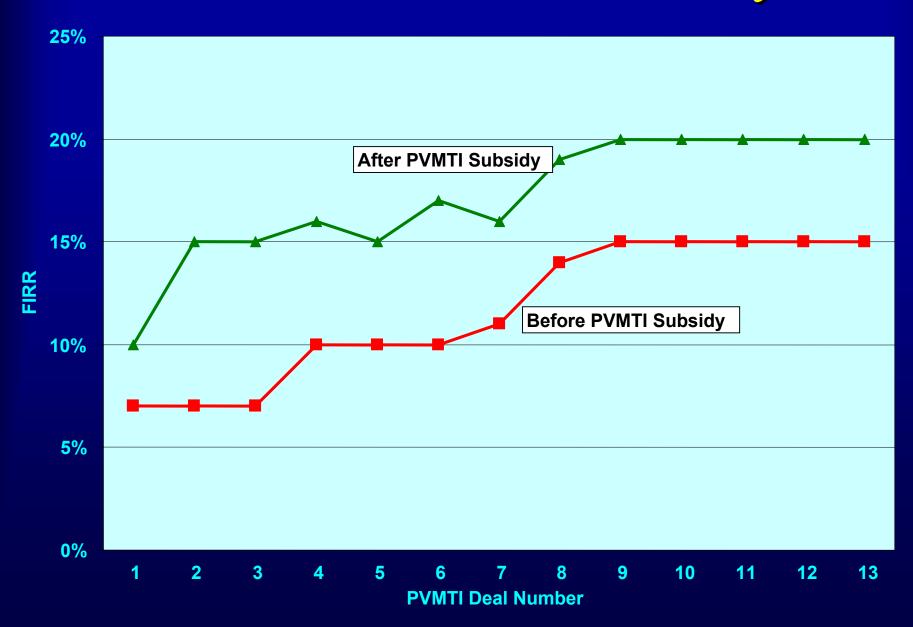




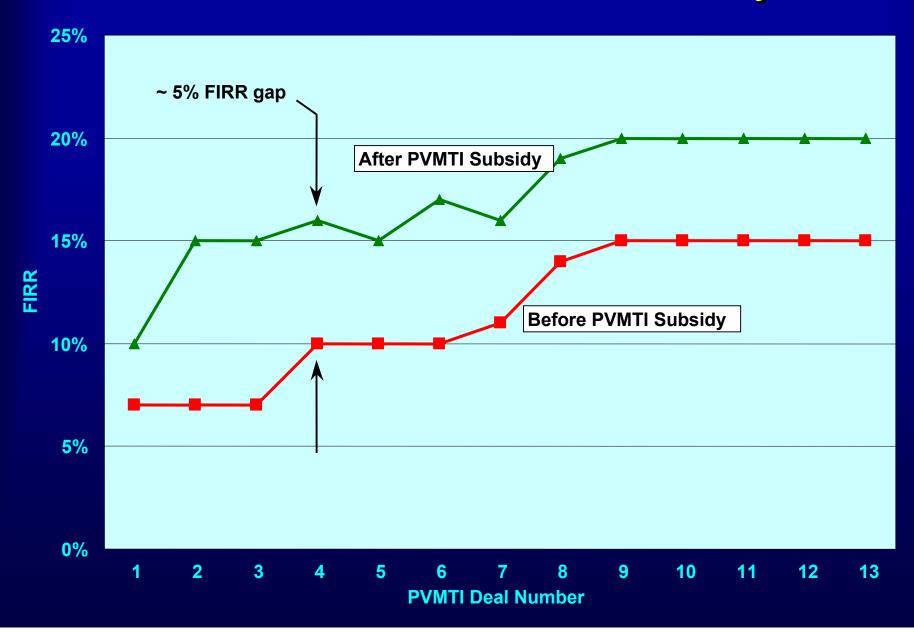
### PVMTI Deal Profitability



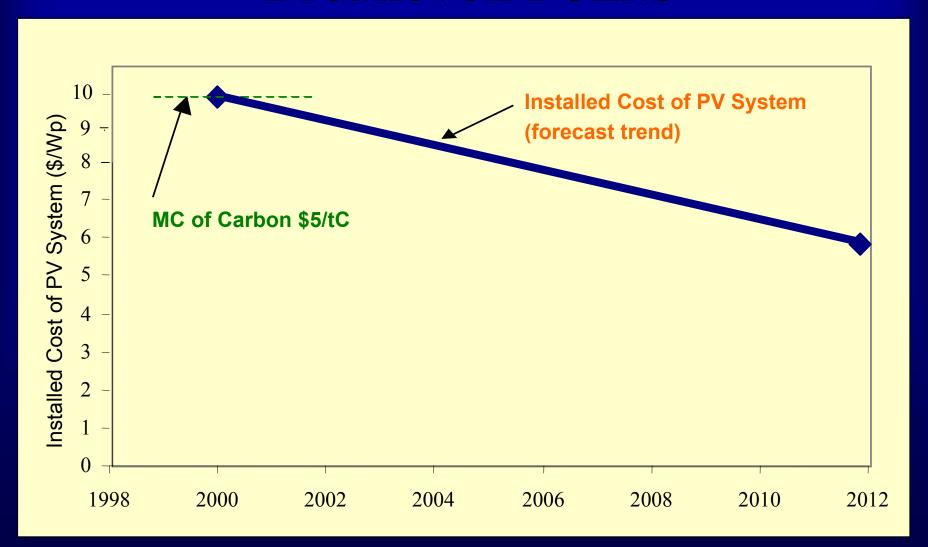
### **PVMTI Deal Profitability**



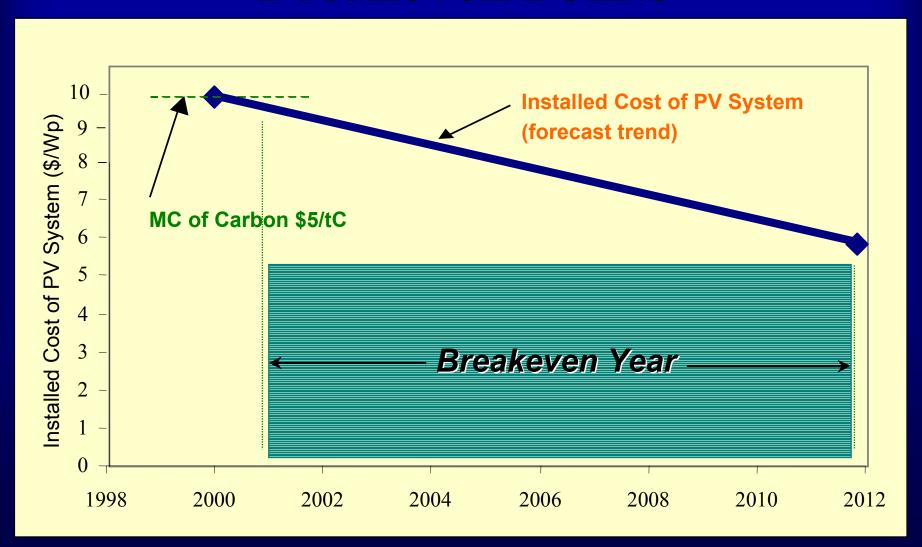
### PVMTI Deal Profitability



### PV and the CDM: Breakeven Points



### PV and the CDM: Breakeven Points



### Keeping the CDM Village Power Friendly

- \$5/tonne Carbon competitive in a future CDM market of \$10-30/tonne Carbon
- But... CDM negotiators: Don't blow it!
- Kyoto attempts to address a long term problem with short term solutions:
  - 2012 carbon credit horizon disadvantages high up-front cost but long-lived renewables
- Unless simplified monitoring and verification protocols are adopted, transaction costs could be a killer

### **Shifting Goalposts**

